

Marketing and Regulatory Programs

Grain Inspection,
Packers and Stockyards
Administration

Grain Inspection Advisory Committee Meeting Minutes

October 27-28, 2015 National Grain Center Kansas City, Missouri

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WELCOME

Mr. Larry Mitchell, Administrator, Grain Inspection, Packers and Stockyards Administration (GIPSA), welcomed everyone to the meeting and introduced the new members to the Grain Inspection Advisory Committee (Advisory Committee). Scott Averhoff, Chairperson, Advisory Committee, welcomed everyone and allowed the members and attendees to introduce themselves.

ACCEPTANCE OF APRIL 7-8, 2015, MEETING MINUTES

The Advisory Committee approved the minutes of the April 7-8, 2015, meeting as presented.

REVIEW AND ACCEPTANCE OF OCTOBER 27-28, 2015, AGENDA

The Advisory Committee approved the October 27-28, 2015, agenda as presented.

MEETING ATTENDEES

Advisory Committee Members

Scott E. Averhoff, Owner/Operator, Scott Averhoff dba SARA Farms
Janice Cooper, Executive Director, California Wheat Commission
Rigoberto Delgado, Senior Partner, Delgado Farms LCC
Nick Friant, Cargill Inc.
Marvin Paulsen, Professor Emeritus, University of Illinois
Timothy Paurus, Vice President Terminal Operations, CHS Inc.
Cesar Ramirez, Manager, Gavilon Grain LLC
Maria Reinitz, Manager, Gavilon, LLC
Todd Russom, Manager, Anheuser-Busch InBev
Jessica Wilcox, Farmer/Crop Insurance Agent, Wilcox Farms
Jimmy Williams, Missouri Department of Agriculture
Steven Wirsching, Vice President and Director, U.S. Wheat Associates

GIPSA

Brian Adam, Chair, Board of Appeals and Review, Technology and Science Division (TSD), Federal Grain Inspection Service (FGIS),

Mary Coffey Alonzo, Director, TSD, FGIS, GIPSA

Tandace Bell, Chief, Biotechnology and Analytical Services Branch, TSD, FGIS, GIPSA Cathy Brenner, Chief, Inspection Instrumentation Branch, TSD, FGIS, GIPSA Tony Goodeman, Acting Director, Field Management Division (FMD), FGIS, GIPSA Karen Guagliardo, FGIS Executive Systems Manager, FGIS, GIPSA Terri Henry, Management Analyst, Management and Budget Services (MBS), GIPSA Eric Jabs, Deputy Director, Quality Assurance and Division (QACD), FGIS, GIPSA Randall Jones, Deputy Administrator, FGIS, GIPSA

Kendra Kline, Assistant to the Deputy Administrator, FGIS, GIPSA

Kent Lanclos, Deputy Director, TSD, FGIS, GIPSA

Pat McCluskey, Branch Chief, Policies Procedures and Market Analysis Branch, FMD, FGIS, GIPSA

Larry Mitchell, Administrator, GIPSA

Tim Norden, Chief Scientist, Analytical Chemistry Branch, TSD, FGIS, GIPSA

I.J. Perez, Public Affairs Officer, MBS, GIPSA

Byron Reilly, Director, Departmental Initiatives and International Affairs, FGIS, GIPSA Samantha Simon, Director, QACD, FGIS, GIPSA

Tom Weber, Chief, Analytical Chemistry Branch, TSD, FGIS, GIPSA

Lisa Wulff, Chemist, TSD, FGIS, GIPSA

Other Attendees

Dave Ayers, American Association of Grain Inspection and Weighing Agencies (AAGIWA)

Sarah Bowser, United Sorghum Checkoff

Mikel Brewster, Charm Sciences

Tom Dahl, AAGIWA

Jason Ferrante, Washington State Department of Agriculture

Breanna Francisco, Eastern Iowa Grain Inspection

David Funk, Grain Quality Analytics, LLC

Andy Gell, FOSS

Jory Harris, Perten

Charles Hurburgh, Iowa State University

Phillip Kelly, Louis Dreyfus Corp.

Chris Klenklen, Missouri Department of Agriculture

Dave Klevisha, FOSS

Carole Koch, Louis Dreyfus Corp.

Jess McClure, National Grain and Feed Association

Tom Meyer, AAGIWA

Kia Mikesh, AAGIWA

Shauna Muelbach, Charm Science

Tom Sliffe, Perten

Larry Speaks, Perten

Mark Tess, Charm Science

Roger Vanderstock, Dickey-john

Erica Venancio, AAGIWA

RESOLUTION REVIEW / REAUTHORIZATION

Mr. Jones reviewed the three resolutions that the Advisory Committee passed at the April 2015 meeting and provided an overview of the Reauthorization of the U.S. Grain Standards Act (USGSA).

The overview of the Reauthorization of the USGSA included the timeline up until it was signed into law on September 30, 2015. The provisions of the USGSA included user fees, limitation costs, authority for appropriations, and the authority to establish the Grain Inspection Advisory Committee.

Mr. Jones also discussed the changes to the USGSA which include the following:

- Requires USDA to approve requests for waivers
- Removes the requirement to weigh inbound barges.
- Establishes that tonnage fees will be based on the 5 year rolling average and that a 3-6 month operating reserve will be maintained.
- Waives geographic boundaries with agreement of the impacted official agencies.
- Extends licenses from 3 years to 5 years.
- Requires that FGIS review Delegated States every 5 years.
- Requires that Delegated States must notify USDA of lapse of service.
- Extends the designation of official agencies from 3 to 5 years

FIELD MANAGEMENT INITIATIVES

Mr. Goodeman provided information and updates on several FMD initiatives.

Export Inspections and Tonnage.

Mr. Goodeman provided an overview of current grain exports. He also provided updates on corn, soybean, wheat, and sorghum movements and the market forces that are driving the increase or decline for each.

<u>Licensing.</u>

Mr. Goodeman provided an update on the FGIS licensing program and the opportunity for improvements in the coming years.

Standards Under Review.

FGIS is currently reviewing the comments regarding the barley standards with six other grains are slated for review in FY 2016.

Fee for Commodity Testing

Mr. Goodeman provided information on the fee rule related to commodity testing. This fee rule currently going through Departmental clearance. When published in the federal register, there will be a 30 day comment period.

Service in Texas.

The FGIS League City Field Office has been providing direct service from certain areas within Texas because the incumbent Official Agency was not redesignated. He also discussed the plans moving forward to staff the new areas in order to provide timely service.

New Lake Charles, Louisiana, Elevator.

The newly renovated elevator in Lake Charles is fully equipped with an FGIS laboratory and FGIS is currently hiring staff to provide service at the new facility in Lake Charles. Staffing Initiatives.

FGIS is running several programs to build for the next generation of FGIS leaders. Most recently, FGIS implemented a Pathways program for new graders with a mobility agreement for the newly hired 4 employees. FGIS plans to conduct another Pathways Program beginning in January 2016.

RICE INSPECTION EQUIPMENT UPDATE

Dr. Lanclos provided an update on rice imaging and rice milling equipment. FGIS has discontinued development work on the Rice Studio for determination of milling yield and broken kernels because of continuing difficulties with sample presentation. Commercially available imaging instruments appear to have resolved the presentation issue and FGIS will instead evaluate these commercial instruments for use in official rice inspection.

Dr. Lanclos next discussed FGIS's plan for evaluating the Zaccaria rice mill as requested by the US Rice Producers Association, a group representing some rice growers in the six rice producing states. The discussion covered applicable regulations, proposed evaluation criteria, and outstanding research issues related to the evaluation.

CONDENSATION STUDY UPDATE

Ms. Brenner provided a summary of previous condensation studies along with the results of the 2015 elevator study in New Orleans, LA. All studies show that when condensation conditions are present, on average, the moisture increases and the test weight decreases. For individual samples, however, it is difficult to predict the direction and magnitude of the changes due to the many variables involved. When condensation conditions are present, the New Orleans Field Office uses a procedure that allows the applicant to request the grain to be placed in an open pan for up to 30 minutes prior to the official determination of moisture and test weight. The study confirms that the 30 minute delay will mitigate some of the changes on the moisture results due to condensation.

BIOTECH TEST KITS

Dr. Bell provided an update on FGIS's evaluation of quantitative protein-based rapid test kits for the detection of genetically engineered proteins in grains and the degree of concordance between this technology and DNA-based detection methods. To date, FGIS has performed analyses of quantitative rapid test kits to compare manufacturer's samples and FGIS-generated samples, as well as analyses to assess sensitivity and specificity of quantitative rapid test kits compared to DNA-based methods. Pending analyses include the initiation of a survey study using "real-world" grain samples. Challenges inherent to this emerging quantitative technology and lack of certified protein-based reference materials.

NEAR INFRARED TRANSMITTANCE (NIRT) EQUIVALENCY PROJECT

Ms. Brenner presented the final information from the NIRT Equivalency Study conducted by Iowa State University through a cooperative agreement with FGIS. The study was limited to the three NIRT models that met the National Type Evaluation Program (NTEP) criteria as of September 2014. The three models received their NTEP approval at different points in time using different sample sets. This study reviewed the performance of the models on a common sample set of wheat, barley, corn, and soybeans. Data for all but barley protein was presented. All models had similar repeatability (variability for repeated tests on the same instrument) and were well within the NTEP tolerances indicating that the hardware/design is suitable. While the variability between the instrument results and the applicable reference methods are good for the individual calibrations, all calibration models could be improved by including newer varieties.

Finally, the reproducibility (variability between models) is not equivalent. The study showed for wheat protein that including all three models had three times the reproducibility as the FGIS approved model which results in a 0.6 percent range in the protein results. Research indicates that it is possible to improve the agreement or reduce the range in protein results by developing calibrations using a common core set of samples such as those used in this study.

MYCOTOXIN TEST KITS

Mr. Weber presented information on the mycotoxin test kit program, providing an update on a previous resolution regarding revision to the test kit performance criteria for aflatoxins, deoxynivalenol, and fumonisins. The revised criteria are expected to be issued in the first quarter of FY 2016. Information supporting the recommended elimination of the qualitative test kit program was presented. The proposed effective date for eliminating the qualitative test kit evaluation program was December 31, 2015, and qualitative test kits would be phased out of the inspection system as their certificates expire.

Mr. Weber also presented an issue with rounding numbers for certifying mycotoxin test results. He recommended using two significant figures for certification to be consistent with the test kit evaluation program, apply same procedure for all mycotoxins, and avoid loss of significant information.

INTERNATIONAL ACTIVITIES

Mr. Reilly provided a briefing on several international activities.

Outreach.

FGIS personnel frequently meet with delegations visiting from other countries to brief them on the U.S. grain marketing system, our national inspection and weighing system, U.S. grain standards, and FGIS' mission. Many of these delegations may visit grain production areas, FGIS field offices, onsite laboratories at export grain elevators, and the FGIS National Grain Center (NGC) in Kansas City, Missouri. Briefings are tailored to address each group's interests and concerns. In FY 2015, FGIS personnel briefed a total of 74 teams from 43 countries.

FGIS worked with the Foreign Agricultural Service (FAS) in Algeria to conduct a 3-day grain grading seminar for wheat, corn, and soybeans in Algiers for 35 public and private sector participants. FAS reported they received positive feedback from the participants. FGIS completed Phase II of the U.S./China Joint Vessel Comparison (JVC) study on two soybean shipments to Dalian, China, with a focus on foreign material in the shipments. The analysis of the data showed a very close correlation between origin and destination results. At the request of U.S. Wheat Associates, FGIS' Chief Scientist participated in a 2-day vomitoxin workshop in Bogota, Colombia. Positive feedback was received from the participants and U.S. Wheat Associates.

Sorghum Survey.

The U.S. Grains Council (USGC) requested FGIS assistance collecting new crop sorghum samples from unit trains to Mexico and export ships. USGC will use this information on the U.S. sorghum crop to assist in marketing U.S. sorghum to international buyers in China, Mexico, and other key markets. USGC asked that we collect 100 sorghum samples from several interior and export port locations. Samples are being sent to a private commercial laboratory to be tested for quality factors beyond the official grade designation.

The additional tests include:

- Protein, starch and oil;
- Kernel diameter, 1000-kernel weight, kernel volume, and kernel hardness index;
- Tannins (quantitative test); and
- Mycotoxins (aflatoxin and DON) only incidences are being reported, not levels.

Quality Discrepancies.

In FY 2015, importers from 5 different countries reported quality discrepancies on 17 grain shipments. The complaints involved 841,144 metric tons, or 7.0 percent by weight, of the total amount of grain exported during the fiscal year. The increase is due to Korea alleging excessive broken corn and foreign material on 14 corn shipments.

In FY 2014, FGIS received 6 quality discrepancies representing 0.3 percent by weight, of the total amount of grain exported.

For FY 2016 to date, we have not received any reports of discrepant results from our customers.

For additional details, please see the attached presentation, International Activities.

QUALITY PROGRAM UPDATES

Mr. Jabs provided updates on several Quality Initiatives and Compliance issues. The QACD's responsibilities continue to contribute to the overall efforts to ensure that FGIS remains the "Gold Standard" for grain inspection and weighing services. In May 2015, FGIS established a Quality Committee. The committee's scope of responsibility is the FGIS Quality Assurance Program. The FGIS Quality Assurance Program ensures the accuracy of official inspection and weighing services and ultimately the certificate. To that end, the committee ensures communication, collaboration, and coordination amongst the FGIS Divisions and the official agencies, discusses issues and concerns associated with the quality assurance and control, and provides program and policy recommendations to the FGIS Executive Management Team and the Quality Assurance and Compliance Division. The committee is comprised of eight members:

- 1. FGIS Board and Appeals Review Chairman;
- 2. FGIS Chief Scientist;
- 3. FGIS Statistician;
- 4. FGIS Departmental Initiatives and International Affairs Division Director;
- 5. FGIS Field Management Division Deputy Director;
- 6. FGIS Technology and Science Division Deputy Director;
- 7. FGIS Quality Assurance and Compliance Division Deputy Director; and
- 8. Official Agency Representative.

Current projects for the committee include two Advisory Committee resolutions. The first is the review of the quality tolerances that was recommended in July 2014. The second is the development of quality performance reports for the official agencies that was recommended in April 2015.

The QACD continues to monitor and report data for the FGIS inspection performance program. The program was initiated in March 2015 to ensure that inspections are accurate and consistent and to proactively identify and correct any inspection variations in a timely manner. In addition, FGIS utilizes the data to provide the grain industry with quality assurances. During FY 2015, overall inspection accuracy was 96.9 percent based on 4,501 samples and 8,925 factors. All field offices had an inspection accuracy of 93.7 percent or higher.

Also during FY 2015, the QACD saw an improvement in official agency overall performance scores for those official agencies that were reviewed under the FGIS Quality Management Program. The program is a key component for evaluating the performance of official service providers in meeting their legal and regulatory obligations under the USGSA. Designated State and private agencies are required to implement and maintain a quality management program (QMP) which melds modern quality management principles with the legal and regulatory requirements under the USGSA. FGIS reviews the QMP of each designated State and private agency at least once every 3 years. An overall performance score is assessed to the official agency based on the results of the review. The overall performance score is a weighted score for each of the quality elements reviewed within the QMP. In FY 2015, the QACD conducted 20 reviews. Eighteen of the 20 official agencies reviewed (90 percent) received an overall performance score of 90 percent or higher. This is an increase over the previous fiscal year in which only 78.6 percent of the official agencies reviewed received an overall performance score of 90 percent or higher. FGIS believes the upward trend is the result of training provided by the QACD to the official agencies, improved internal audits by the official agencies, a renewed focus on QMPs, and improved communications between the QACD and the official agencies regarding FGIS expectations.

For additional details, please see the attached presentation, Quality Program Updates.

FGISONLINE

Ms. Guagliardo provided information on two of the current projects for FGISonline for FY 2016. A discussion on the current status of FGISonline and the future plans for development of FGISonline including a customer portal.

The benefits were also discussed which are greater customer access to information, reduce manual data entry, and reduce potential for errors.

For additional details, please see the attached presentation, FGISonline.

FINANCIAL UPDATES

Ms. Kline provided updates on the Inspection and Weighing (520) Program, Official Agencies (530) Program, Rice Inspection (570) Program, and the Commodity Inspection (580) Program, recognizing that numbers provided were draft.

NEXT MEETING

The Advisory Committee recommends the next meeting be held April 18-19, 2016, and would prefer the meeting to be held in Portland, Oregon, or at the National Grain Center in Kansas City, Missouri.

RESOLUTIONS

The following resolutions were introduced and passed by the Committee:

- 1. The Advisory Committee recommends that Qualitative Mycotoxin Tests be phased out as the current supply meets their expiration date.
- 2. The Advisory Committee recommends FGIS move forward to certify testing results to a minimum of 2 significant figures as a default for mycotoxins. However, FGIS will allow the results on the certificate to be shown as either a whole number or the nearest tenth at the request of the applicant using current FGIS rounding rules.
- 3. The Advisory Committee commends FGIS on the development of the USDA Rice Studio Rice program; and recommends that imaging technology be studied for possible use in the determination of percent Dark Hard and Vitreous (DHV) for spring wheat sub classes. FGIS should also study the possible use of this technology to determine shrunken and broken kernel count in all wheat classes.
- 4. The Advisory Committee encourages FGIS to initiate a study with rough rice to determine the effectiveness of the Grainman Miller No. 65 for predicting commercial rice milling yield. Factors to consider in addition to milling yield are total broken kernels, whiteness and chalkiness. Newer rice hybrids along with their harvest and drying history should be included in the study.
- 5. The Advisory Committee encourages FGIS to obtain background information pertinent to understanding the possible degree of condensation that could form when cold grain is unloaded from barges or railcars and transferred to a FGIS inspection site at a humid location. The intent is to record grain temperature data as already provided by moisture meter determinations on sublots of grain. Grain temperatures from a random sampling of 100 sublots during each month of the year would provide an indication of the months of the year when moisture condensation is most likely to occur. Data could show that if seasonally cold grain is found, it might be prudent to allow the cold samples to have a few additional minutes to warm up before testing for moisture and test weight.
- 6. The Advisory Committee recommends FGIS make the financial results available on the FGIS web site. This information would include sufficient detail to show revenues, expenses and operating reserves for each account (520, 530, 570 and 580). Additionally in the 520 account each of the revenue and expense area should be detailed to reflect the national tonnage fee, local tonnage fee and the hourly/ inspection fees and the expenses attributed to each.
- 7. The Advisory Committee recommends that FGIS explore options for standardizing calibrations between NIRT models to improve the overall reproducibility.

